### **DEWPOINT PROBLEMS**

# 1. DRYER NOT READING ACTUAL DEWPOINT

- A. Bad dew point sensor. Depending on the type of material/wetness of material, usage of dryer, and humidity of ambient air. Sensor should be changed every 6 months to yearly. The sensor has no way of drying itself out.
- B. Bad dew point board. Check the dew point board by disconnecting the leads off the dew point sensor at the dew point manifold block. Your display screen should read-40 if the board is functioning properly.
- C. Circuits between sensor, dew point board, or main control board are loose, disconnected, or improperly placed.

# 2. DRYER IS READING ACTUAL DEWPOINT, BUT NOT MAINTAINING DESIRED DEWPOINT.

- A. Hoses may have holes or leaks. (Process or Return)
- B. Leak at the hopper(s). Most commonly the lid or access door on the hopper.
- C. Leaks inside of dryer. Check bed seals, hoses, heater boxes, ect.
- D. Return temperature too high. 150 deg. F and lower is recommended. If return temperature is above 170 deg F. we recommend a aftercooler.
- E. Improper regeneration cycle. Regeneration heat not reaching or maintaining 550 deg. F. (1) Possible regen heater fault. Check regen temperature on display and/or regen heater amperage draw. (2) Possible skipped bed. Check limit switch for proper alignment with each bed.(3) Possible blown fuse, check fuses. (4) Possible defective contactor, check voltage out of the regen contactor when energized
- F. Desiccant. Desiccant low or contaminated. When changing desiccant make sure beds are packed tightly.
- G. Regen delay time set too high. Set at factory to dryer size, but can be changed. Be careful setting this time because it will affect dew point and also process temperature during and after bed shift.
  - H. Improper application. Dryer is undersized for material through put.
- I. Inadequate backpressure. Hopper must have material in it for sufficient backpressure. The dryer must have backpressure for process air to flow through dew point sensor.

## TEMPERATURE PROBLEMS

### 1. DRYER NOT HEATING UP TO TEMPERATURE.

- A. Probe failed. Display will read temperature at 999 deg F. Thermistor has failed or thermistor leads have a open circuit.
  - B. Blown fuse. Always remember to replace fuse with proper amperage rating.
  - C. Heater failure. Check amp draw when contactor is energized.
- D. Safety thermostat malfunction (If equipped). Jump out thermostat to verify, If faulty change.
- E. Faulty cube relay. Heater contactor will not be energized, But coil on cube relay will.
- F. Main board malfunction. No output at main board. Possible chipswitch/fuse on main board.

# 2. DRYER TEMPERATURE TO HIGH

- A. Hopper not properly sized to dryer, or hopper not adequately full of material.
- B. Dryer process outlet restricted. Due to numerous different applications many customers reduce, or tee off the process hose at the dryer. Sometimes this works well, but in many cases this tends to lead to over temp problems.
  - C. Regen delay time set too low. Should notice temperature spike at bed shift.
  - D. Improper airflow. Collapsed hose, or filter plugged.
  - E. Temperature set too low. Temperatures below 150 deg. F. require a precooler.

## 3. DRYER IMPROPERLY READING DRYING TEMPERATURE

- A. Temperature probe improperly set, or faulty.
- B. Main control board faulty. Improperly reading probe.
- C. Process blower running backwards. Improperly phased.